
WATERLINES

News affecting the management and use of Indiana's water resources

DIVISION OF WATER
INDIANA DEPARTMENT OF NATURAL RESOURCES
FALL-WINTER 2001

HOW COMMUNITIES CAN HELP PROTECT THEMSELVES FROM FLOOD LOSSES

**This article is a modification of a FEMA series on preparedness and prevention designed to assist communities in becoming more disaster-resistant.*

Flooding is the most common natural disaster in the United States. By educating residents about the National Flood Insurance Program (NFIP) and flood insurance, local officials can help protect citizens from the personal and financial devastation floods can cause. The NFIP assists communities with this challenge by making federally backed flood insurance available in communities that adopt and enforce floodplain management ordinances to reduce future flood damage. The Department of Natural Resources (DNR) is the State Coordinating Agency for the NFIP in Indiana. The DNR can provide technical assistance, conduct workshops, and seminars to help community officials/staff better understand the benefits and requirements of the NFIP.

Public entities, homeowners, renters, and businesses in communities across the United States can buy this important insurance coverage, which is not offered in standard homeowner or business insurance policies. Currently there are 394 Indiana communities that participate in the NFIP. As of

July 11, 2001 there were 25,577 flood insurance policies in force in Indiana providing total coverage of \$2,186,013,900. Further the NFIP, managed by the Federal Insurance and Mitigation Administration and Mitigation Directorate, a part of the Federal Emergency Management Agency (FEMA), is a self-supporting program. An important note is that the \$47,681,913 paid in claims to Hoosiers since 1978, as well as the program's operating expenses, are paid from policyholder premiums, not tax dollars.

It is especially important that local officials carry appropriate flood insurance on their public buildings. One of the first steps that a local community official should take is to find out if there is adequate flood insurance coverage for public buildings in the community. Officials should remember that if a public building located

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in a Special Flood Hazard Area is damaged in a flood, the building is only eligible for disaster assistance if a Federal disaster is declared. In the event of a Federal disaster declaration, disaster assistance would consist of reimbursement of damages above the level of insurance that would have been available on the building.

Flood insurance is important to the community as a whole. When a flood hits a community, not only does it cause property damage, but also it can cripple the economy and displace its residents. Businesses may be forced to temporarily or permanently close, and employees of these businesses, who are also homeowners and renters, can lose their jobs as a result and may be forced to relocate. A study conducted by the University of Wisconsin shows that more than 43 percent of small businesses never reopen after a natural disaster and nearly 29 percent close within two years. Floods can hurt a community for years to come, and the local economy may never recover.

In addition to providing flood insurance claim benefits following a flood disaster, the NFIP is effective in helping to prevent or reduce future flood damage. Community participation in the NFIP is based upon a partnership. Individual property owners are able to purchase flood insurance underwritten by the Federal government in return for their elected officials establishing a safe, consumer-protection-oriented local floodplain management program. This local floodplain management program provides a mechanism for local officials to monitor and revise future development in the floodplain to eliminate or minimize future damages. Studies have shown that the building of structures in compliance with the NFIP's building standards helps to reduce the potential future flood damage to those buildings by more than 75 percent. And, when a structure is built to or beyond the standards, the flood insurance premium for that structure is less, because the flood risk is lower.

When disaster does strike, and it will, homeowners and renters without flood insurance may have to turn to other types of assistance to recover, which

may require State or local tax dollars and other resources. If a Federal disaster is declared, grants and loans may be available to help flood victims get back on their feet, but these programs are not designed to make people whole. This disaster assistance carries a heavy price tag paid by taxpayers. Often such assistance is not available because the impact of the disaster is not great enough to receive a Presidential declaration, leaving homeowners and renters to draw upon their own resources to repair and recover from the damage.

Because residents and businesses with flood insurance begin the process of recovery more rapidly, the entire community can get back on its feet more quickly and easily after a flood event. When residents and business owners have National Flood Insurance, their claims are paid through the insurance mechanism. Flood insurance provides them with money to rebuild, even if a Federal disaster is not declared. That means businesses can reopen more quickly after a flood, employees can continue to work in the area and the economy can rebound. Also, residents can take steps as they rebuild to make their homes and businesses more disaster resistant to reduce future damage.

Community officials play a critical role in educating and promoting the benefits of the National Flood Insurance Program, as well as other prevention steps, to their residents. One of the biggest challenges the NFIP faces is educating the public on the location of potential flood risks within their communities and the availability of flood insurance. Community leaders need to promote and prominently display flood maps or other documents that highlight the flood risks for their community. They must get the word out that their community has adopted a floodplain ordinance that requires homeowners and businesses to obtain a building permit for development in the floodplain. The residents of each community should be aware of their designated floodplain management official and be encouraged to utilize this person for technical assistance during construction. The citizens must

also understand that flood insurance is available to all individuals living in a community that participates in the NFIP. One does not have to live in the Special Flood Hazard Area (SFHA), as indicated on the Flood Insurance Rate Map, to be eligible to purchase flood insurance.

When people hear about floods and the coverage available through flood insurance, many still think, “It won’t happen to me.” Local officials can be instrumental in helping people understand their flood risks and that flood insurance is the best way to recover after a flood. Research shows that people believe local experts who can provide them with local information about their flood risk. As that expert, a local official is in a position to help the community and its residents – who are also your family, friends, and neighbors – before a flood hits. These efforts can make a difference to your community’s future.

What can a community official do right now? In many cases local insurance agents and lenders are not informed as to the benefits and requirements of the NFIP. They lack the correct information to answer customer questions, which results in misinformation. Local officials should publicize the NFIP educational offerings to local insurance agents. The NFIP provides Insurance Agent and Lender Workshops each year in Indiana. For more information concerning the Indiana workshops for Insurance Agents and Lenders, contact Rich Slevin, Regional Marketing Manager for the NFIP at (630) 577-1407.

Community officials may also wish to initiate a community-wide NFIP educational campaign. One way to start is by establishing an NFIP resource library in the community offices. FEMA has resource materials for community use. One of these is FEMA’s *Good Ideas Book*, item number 8-1108. It provides many suggestions about ways to communicate to a community the flood risk of the area and the benefits of flood insurance. For a copy of this book, call the FEMA Publications Distribution Center at 1-800-480-2520.

The NFIP has produced many brochures, fact sheets, and stuffers that explain the importance of flood insurance, to help local officials and others provide accurate and helpful information to people in their communities. For an order form of these free brochures and other public awareness materials for an outreach campaign, NFIP communities can call the FEMA Fax at (202) 646-FEMA (or toll-free 1-800-480-2520), and request an order form. Another source of information is the FEMA/NFIP website which can be found at <http://www.fema.gov/nfip>. ☞

INDIANA’S NEWEST CERTIFIED FLOODPLAIN MANAGERS (CFM)

The Certified Floodplain Manager exam was offered at the Indiana Association for Floodplain and Stormwater Management Annual Conference in November 2001. Seven individuals passed the exam and earned the title of Certified Floodplain Manager (CFM). Congratulations to Indiana’s newest CFMs!

Greg Main, CFM, Pendleton, IN
David Knipe, CFM, P.E., Greenwood, IN
Michael Dale, CFM, Greenfield, IN
James Rinehart, CFM, Indianapolis, IN
Rick Eberly, CFM, Dyer, IN
Susan Bodkin, CFM, Wilkinson, IN
Chad Coughenour, CFM, Greenfield, IN

For further information on the Certified Floodplain Managers Program or for a list of current CFMs, visit the Association of State Floodplain Managers (ASFPM) web site at www.floods.org. ☞

DNR WELCOMES NEW DIRECTOR

After serving the Department of Natural Resources (DNR) for five years, Larry Macklin left the Department to pursue other interests. John R. Goss, former Director of Tourism, has been named as the new DNR Director. Mr. Goss brings a great deal of experience to this position, having served 12 years on the Natural Resources Commission. Welcome Director Goss!

CONFERENCE CORNER

INAFSM Conference

The Indiana Association for Floodplain and Stormwater Management (INAFSM) held its 5th Annual Meeting and Conference on November 14-16, 2001 at the Holiday Inn City Center in South Bend. Originally scheduled for September 12-14, the conference was re-scheduled due to the September 11 terrorist attacks on the United States.

Honorable Stephen J. Luecke, Mayor of South Bend, welcomed attendees. The conference featured informative sessions on various aspects of stormwater and floodplain management with speakers from the collegiate and private sector as well as Federal and State government. Also, the Porta High School Problem Solvers from Petersburg, Illinois gave a presentation on their outstanding mitigation success.

The following awards were presented at the annual conference to recognize outstanding individuals, communities, and projects: Excellence in Stormwater Management Award was awarded to Kevin Kirk of the City of Indianapolis; the Outstanding Stormwater Project Award went to Knox County; Excellence in Floodplain Management Award was awarded to Brad Stump of DeKalb County and Chris Schweitzer of the City of Auburn; Outstanding Floodplain Project Award went to Howard County and the City of Kokomo; Excellent Strides in Floodplain Management Award was presented to Hancock County; Chairman's Award for Outstanding Service in Support of the INAFSM was awarded to Debbie Smith; and the Board of Director's Award was presented to Mike DeBoy. ☺

Mark your calendars! Next year's INAFSM Conference will be held at beautiful Turkey Run State Park on September 11-13, 2002.

ELEVATION CERTIFICATE TRAINING NOW OFFERED ONLINE FOR SURVEYORS

Certifying building elevations on the Elevation Certificate just became a lot easier, thanks to a new web-based training module developed for land surveyors, engineers, and architects.

The Surveyor's Guide to the Elevation Certificate is available through the National Flood Insurance Program (NFIP) web site hosted by the Federal Emergency Management Agency (FEMA). Located at www.fema.gov/nfip, the NFIP web site provides a wide range of information about all aspects of floodplain management and flood insurance.

After accessing the NFIP web site, visitors can select "Surveyors" under "Audience Type" to view the tutorial for surveyors. The surveyor's tutorial also was developed to assist the community officials who monitor compliance with the elevation requirements of their communities' floodplain ordinances.

It takes about half an hour to browse through the new tutorial. At the home page of the Surveyor's Guide to the Elevation Certificate (EC), visitors view a short introduction to the EC and then click on three section tabs to move around the site.

- Clicking on the "Elevation Certificate" tab allows visitors to view and download an electronic copy of the EC along with instructions in how to complete it.
- Clicking on the "Surveyor Video" tab opens a video that briefly describes the process a surveyor follows to establish a building's elevation points.
- Clicking on the "Bldg. Diagrams & Photos" tab displays a series of eight sample building diagrams and representative photos. This section is designed to show where to take the necessary elevation measurements for each building diagram.

Navigation tools at the bottom of each page on the site provide information not only for how to move around within the tutorial and how to use each section most effectively, but they also allow visitors to e-mail their questions or comments directly to EC specialists at FEMA.

For more information about the new Surveyor's Guide to the Elevation Certificate training module, visit the site (<http://nfip.kevric.com/ecsurveyor/>). If there are questions about completing the EC, contact the FEMA regional office covering your state or your State NFIP Coordinator. Contact information for each FEMA regional office is accessible at: <http://www.fema.gov/about/regoff.htm>

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GUIDELINES FOR DEBRIS REMOVAL FROM CREEKS

Frequently questions arise regarding the removal of logjams and other debris from streams across the State. What can be done and what cannot be done? Does it need a permit or not?

A Construction in a Floodway Permit or a Logjam Exemption is **NOT** required if these simple guidelines are followed. These guidelines do **NOT** authorize trespassing.

Use only hand-held tools such as chainsaws, axes, handsaws, etc. in the stream channel.



If motorized, vehicular equipment such as small tractor, backhoe, bulldozer, log skidder, four-wheel drive truck, etc. is proposed for use in the stream channel, anywhere below the top of the banks, then the project does **not** qualify under these guidelines and a Notification of Construction in a Floodway under IC 14-28-1 for Obstruction Removal for River and Stream Maintenance form must be completed and submitted to:

Division of Fish and Wildlife, Environmental Unit
Department of Natural Resources
402 West Washington Street, Room W273
Indianapolis, IN 46204
Telephone (317) 232-4080

DO NOT grub (pull out) trees or tree stumps from the bank. Leaving the stumps holds the bank from eroding.

NO EARTH-MOVING should occur. Do not remove sand bars or other soil, sediment, sand, or gravel from the creek. These provide habitat for fish and other aquatic species.

All trees, brush, and debris that are causing severe obstruction to flow and are proposed for removal, must be removed from the channel so as not to float downstream during a flood and create another blockage.

Fallen trees and debris may be dragged from the stream using cables, winches, and vehicles, provided the vehicles are not used below the top of the banks.



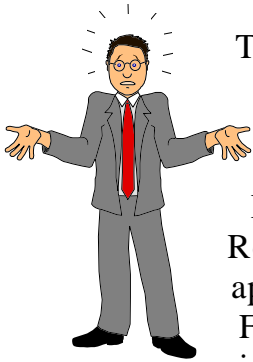
Some brush and fallen trees in a creek provide food, shelter, and other benefits to fish and wildlife. Leave as much as possible in a **NATURAL CONDITION**, untouched by humans. ~

LOOK AT WHAT'S NEW

The Division of Water recently made additions to its web site. The following publications are now available on the web at www.IN.gov/dnr/water

- Local Floodplain Administrator's Guide
- Division of Water Benchmarks for Indiana
- Coordinated Discharges of Selected Streams in Indiana
- Indiana Drainage Handbook ~

BUT THE DNR SAID I COULD...



These are words that can make a local official cringe. Occasionally there is a misconception that if the Department of Natural Resources (DNR) issues an approval for Construction in a Floodway, the proposed project is automatically allowed. But

that is *not* the case. Indiana's Flood Control Act sets out criteria that must be met in order for State approval to be granted for a proposed project.

In order to be approvable, an applicant has to demonstrate that the proposed project will:

- (a) not adversely affect the efficiency or unduly restrict the capacity of the floodway; defined as, the project will not result in an increase in flood stages of more than 0.14 feet above the base 100-year regulatory flood elevation.
- (b) not constitute an unreasonable hazard to the safety of life or property; defined as, the project will not result in either of the following during the regulatory flood: (1) the loss of human life, (2) damage to public or private property to which the applicant has neither ownership nor a flood easement.
- (c) not result in unreasonably detrimental effects upon fish, wildlife or botanical resources.

Additionally, the Department must consider the cumulative effects of the above items. An approval from DNR simply means that the proposed project met those State criteria.

Applicants *and* local officials must keep in mind that there are other regulations that may apply to a proposed project. Local floodplain regulations may be more restrictive than those required by the Flood Control Act. There may also be local zoning or construction regulations for the type of construction, type of use, setbacks, and other restrictions. Department of Health regulations may prohibit some activities in the floodplain. There may also be other State or Federal requirements

that may not allow the proposed project or may require the project plans be changed to meet a more restrictive standard.

Applicants should always check with their local official *prior* to beginning a project in the floodplain. If there is a more restrictive regulation, the more restrictive regulations ALWAYS apply.



RULE CHANGES NOW IN EFFECT

Changes to Indiana's Floodplain Rules, 312 IAC 10, became effective on January 1, 2002. Communities participating in the National Flood Insurance Program should take note. Although most of the changes are for the purpose of clarification, one significant change was made regarding opening requirements.

312 IAC 10 requires that enclosed areas below an elevated building, where the walls of the enclosure provide some resistance to the flow of flood water, have the walls designed to automatically equalize hydrostatic flood forces by allowing for the entry and exit of flood water. There must be at least two (2) permanent openings that are designed and maintained for the entry and exit of floodwater. The openings must provide a total of at least one (1) square inch for every square foot of enclosed floor area subject to flooding. The bottom of an opening can be no more than one (1) foot above grade. Doorways and windows do not qualify as openings.

The new opening requirement is *less* restrictive than the previous requirements and is now equivalent to the federal requirements found in 44 CFR 60. NFIP communities will have the option of relaxing their floodplain regulations in this regard. However, any references to the previous Floodplain Rules (310 IAC 6-1) within a community's floodplain regulations *will* need to be amended. The Floodplain Management Section will be contacting NFIP communities regarding needed ordinance amendments. The Floodplain Rules (Title 312, Article 10) can be found on the web at www.IN.gov/legislative/iac.



PRECIPITATION REPORT FOR JULY THROUGH DECEMBER 2001

The above normal rainfall pattern, seen in many areas during May and June, intensified in some areas of Indiana during July. Heavy rain during the month caused localized flooding. July 2001 was the fourth wettest on record at Fort Wayne. For Indianapolis, this was the wettest July since 1992.

Rainfall amounts varied greatly across the State during August with a range of 1.5 inches to over 8.5 inches. A total of 4.56 inches of rain fell during the month at Fort Wayne, 1.19 inches above normal. At South Bend 3.75 inches of rain fell, which was 0.08 inches above normal for August.

Fort Wayne and South Bend again received above normal precipitation during the month of September. September rainfall was near normal to above normal in most of Indiana.

During October, rainfall ranged from 6 to nearly 12 inches across much of northwest, central, and southern Indiana. Evansville reported over two and one-half times the normal amount of rainfall. Precipitation was also much above normal again at both Fort Wayne and South Bend. At Fort

Wayne 7.40 inches of rain fell, 4.91 inches above normal. At South Bend 7.06 inches of rain fell which was 3.98 inches above normal for October. The September-October rainfall at Indianapolis was the third wettest of record and the wettest since 1986.

Generally, rainfall was below normal in the northern portion of Indiana and much above normal in the southern areas during November. Southern Indiana experienced heavy rains in the later part of the month. Because of these rains, flooding returned to the East Fork White and White Rivers in southern Indiana.

For most of Indiana, the first significant rain events of December occurred during the middle of the month. Although most of the northern portion of the State experienced below and near normal precipitation, southern Indiana again had above normal rainfall amounts. Flood levels in portions of southern Indiana were the highest since May 1996. Extensive flooding occurred along portions of the White, Wabash, East Fork White and Muscatatuck Rivers. At the end of the month, rivers in southern Indiana were falling steadily. The last week of 2001 turned bitter cold and most areas had snow flurries during that week. Only the northern areas experienced any accumulation.



KEY:

ACTUAL (INCHES)
NORMAL (INCHES)



Locations	July	August	September	October	November	December	Totals 2001
CHICAGO IL	2.96	12.25	6.05	8.54	1.22	0.99	45.77
	3.66	4.22	3.82	2.41	2.92	2.47	35.84
SOUTH BEND	2.97	3.75	3.65	7.06	2.66	2.29	39.97
IN	3.82	3.67	3.62	3.08	3.27	3.30	39.14
FORT WAYNE	6.70	4.56	4.04	7.40	2.30	2.54	41.90
IN	3.45	3.37	2.67	2.49	2.79	2.89	34.75
INDIANAPOLIS	8.34	2.47	4.66	7.02	2.64	3.01	41.87
IN	4.47	3.64	2.87	2.63	3.23	3.34	40.05
EVANSVILLE	5.54	6.12	2.42	7.27	5.42	7.16	49.95
IN	4.04	3.11	2.97	2.87	3.73	3.67	43.14
LOUISVILLE	4.47	3.42	4.08	6.39	5.16	4.47	43.93
KY	4.51	3.54	3.16	2.71	3.70	3.64	44.39
CINCINNATI	8.70	5.00	3.13	6.73	3.31	4.08	46.58
OH	4.24	3.35	2.88	2.86	3.46	3.15	41.33

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Editor - Anita Nance

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